

Important Advances in Clinical Medicine

Epitomes of Progress—Obstetrics and Gynecology

The Scientific Board of the California Medical Association presents the following inventory of items of progress in Obstetrics and Gynecology. Each item, in the judgment of a panel of knowledgeable physicians, has recently become reasonably firmly established, both as to scientific fact and important clinical significance. The items are presented in simple epitome and an authoritative reference, both to the item itself and to the subject as a whole, is generally given for those who may be unfamiliar with a particular item. The purpose is to assist the busy practitioner, student, research worker or scholar to stay abreast of these items of progress in Obstetrics and Gynecology which have recently achieved a substantial degree of authoritative acceptance, whether in his own field of special interest or another.

The items of progress listed below were selected by the Advisory Panel to the Section on Obstetrics and Gynecology of the California Medical Association and the summaries were prepared under its direction.

Reprint requests to: Division of Scientific and Educational Activities,
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Current Concepts in Sterilization for Women

HUMAN STERILIZATION is the final step an individual can take to effectively prevent procreation. As it plays such a major role in fertility termination, sterilization must be an integral part of any family planning program. Over the last decade, voluntary sterilization has emerged from the mire of public unawareness and medically restrictive guidelines to become a widely used method of birth control throughout the world. Moreover, a number of new methods have been developed for simplifying surgical sterilization for women.

Classical methods of tubal ligation or standard gynecologic operations offer reliability, but little innovation. With the development of remote ("cold") fiberoptic light sources, separate pneumoperitoneum instruments and more sophisticated accessory equipment, transabdominal peritoneoscopy (laparoscopy) has provided a panoramic, laparotomy-like view of the pelvis. In the last two

to three years, the impact of laparoscopy on gynecology has been tremendous. The most profound and prolific effect has been in the area of tubal sterilization, where laparoscopy has added rapidity, simplicity and, in many centers, an outpatient approach. The pregnancy rate (0.1 percent), following properly performed laparoscopic fulguration and tubal transection, is as good or better than that seen following classical tubal ligation. The overall complication rate varies from less than 1 percent to about 6 percent, although major complications are reported at a rate of approximately six per 1,000 (0.6 percent). Possibly the development of laparoscopic tubal clips or bands will eliminate some of the problems associated with electrocoagulation.

The ultimate goal is to reduce female sterilization to an office or clinic procedure not involving violation of the abdominal cavity, thus placing it in a position equal to vasectomy. A successful transuterine tubal sterilization method could be the answer, but hysteroscopic fulguration of the tubes

as they enter the endometrial cavity has not been a very successful, nor safe, technique. Until the transuterine approach is perfected, laparoscopic tubal sterilization should be advocated, offered and used by well-trained, competent gynecologists.

ROBERT ISRAEL, MD

REFERENCES

- Israel R: Current concepts in female sterilization. *Clin Obstet Gynecol* 17:139-156, Mar 1974
Whitson LG, Ballard CA, Israel R: Laparoscopic tubal sterilization coincident with therapeutic abortion by suction curettage. *Obstet Gynecol* 41:677-680, May 1973

Status of Antihypertensive Therapy in Obstetrics

The traditional objective of antihypertensive therapy in pregnant patients has been to prevent the renal and cerebral sequelae that may result from hypertension. Recent animal experiments have shown a reduction in uterine blood flow during the acute phase of mild hypertension. This observation has serious fetal implications and may be related to the increased perinatal mortality and morbidity associated with gestational hypertension. Thus the choice of antihypertensive drug should take into account both maternal and fetal risks. While lowering the arterial pressure pharmacologically will protect the maternal cerebral vasculature, a further reduction in uterine blood flow may also occur which will further compromise the fetal environment.

Hydralazine, the drug of choice in many centers for the acute management of gestational hypertension, effectively lowers peripheral vascular resistance. In addition, it is known that hydralazine has a positive inotropic and chronotropic effect upon the heart resulting in an increased cardiac output. Studies in pregnant sheep have shown that the increased cardiac output increases the uterine blood flow significantly. This incremental flow to the uteroplacental circulation may be of great benefit to fetal welfare.

Hydralazine, therefore, should remain the drug of choice for acute gestational hypertension for both maternal and fetal indications.

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- Assali NS, Brinkman CR III: Disorders of maternal circulatory and respiratory adjustments, *In Pathophysiology of Gestation*, Vol 1. New York, Academic Press, 1972, pp 269-353
Brinkman CR III, Nuwayhid B, Assali NS: Renal hypertension and pregnancy in the sheep—Part 1: Behavior of uteroplacental vasomotor tone during mild hypertension. *Am J Obstet Gynecol*, In press

The Gravlee Jet Washer

THE GRAVLEE JET WASHER® is one of a number of devices available for increasing the yield of an endometrial sample. While not satisfactory as a method of assessing benign endometrial disease, it has proved successful in obtaining identifiable samples of the relatively viable cells of endometrial adenocarcinoma. When combined with endometrial biopsy, it provides a practical office method for assessing the possibility of endometrial adenocarcinoma in patients with perimenopausal bleeding.

One advantage of the jet washer is the fact that any desired amount of irrigating solution can be used with little or no danger of tumor dissemination because the fluid is circulated in a negative pressure system.

The tissue obtained is preserved by the addition of an equal volume of Papanicolaou fixative to the irrigating solution. From this a cell block is prepared to give a histologic specimen, which is superior to cytologic study.

While jet washing is a useful office procedure, it must be remembered that it is not as accurate as a diagnostic curettage. If one's index of suspicion is high, or symptoms persist, a negative report for cancer should be substantiated by a curettage.

LESTER T. HIBBARD, MD

REFERENCE

- DePetrillo AD, DiSaia PJ, Morrow CP, et al: The Gravlee Jet Washer effectiveness as performed by ob/gyn and paramedical personnel. *Am J Obstet Gynecol* 117:371-374, Oct 1973

Audiovisual Techniques in Sex Education of Patients and Students

CERTAINLY MOST PEOPLE can derive benefit from a learning opportunity designed to clarify sexual and reproductive functions.

A curriculum prepared primarily for patients can be used for student instruction with relatively little modification. A variety of materials (for example, brochures, books, questionnaires, diagrams, plastic models, slides, films and audio and video tapes), if chosen carefully, can offer invaluable assistance to those engaged in the design and implementation of treatment programs for individual persons and couples with the complaint of "sexual dissatisfaction." Items selected should be evaluated periodically to ascertain their effective-